Jennifer Boffo Hazard Independent High School 20 years in the classroom



September/October 2007

News for the Nation's Most Innovative Educators

www.education.ky.gov

Project Lead The Way helps districts advance STEM education

By Faun S. Fishback

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It's not easy trying to convince today's young people that high-level knowledge and skills are what they need to capture high-paying jobs. They are not conscious of the American jobs that have been lost to lower-paid workers in other countries. They haven't discovered yet that the jobs supporting their family now may not offer as comfortable a lifestyle in the future.

When many students believe reality is a TV program where people make \$1 million for surviving in a jungle or being an idol, how can schools get young people interested in learning the academic and workplace skills they will need to be successful adults?

That dilemma has captured the attention of Kentucky public schools and postsecondary leaders. Earlier this year, the Kentucky Council on Postsecondary Education created the Science, Technology, Engineering and Mathematics (STEM) Task Force to develop a statewide P-20 strategic action plan to accelerate STEM education throughout the state.

According to a report released by the STEM Task Force, "dramatic acceleration of performance" in science, technology, engineering and mathematics must occur among Kentucky students if the state is to improve per capita income and be a strong competitor in the increasingly global economy. The task force made eight recommendations that outline what Kentucky must do to better prepare for the future. (See Page

Some public school districts already have found ways to excite students about higherlevel learning and about becoming inventors, scientists and engineers. Trigg County,

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Scott County and Pulaski County school districts are among a small-but-growing group of districts using Project Lead The Way (PLTW) to create a pipeline to help students work toward postsecondary studies in STEM fields and to prepare them for jobs that use skills in those areas.

Currently, 21 Kentucky school districts offer PLTW courses in 25 high schools and 23 middle schools. Thirteen of those districts have received matching-funds grants as a joint initiative of the Kentucky Department of Education and the Council on Post-secondary Education to prepare students for success in Kentucky's engineering and economic future.

"We recognize that producing high-quality engineers in Kentucky is important to the economic development of our state," said Jim Applegate, vice president of Academic Affairs at the Council on Postsecondary Education.

During the recent special legislative session that focused on energy issues, the legislature appropriated \$300,000 to the Department of Education to create an energy technology engineering career track program. Middle and high schools can use the program to prepare students for STEM jobs in the energy industry.

PLTW offers hands-on, pre-engineering courses designed to increase the number of students from diverse backgrounds who are successful in STEM courses. The program offers activities at the elementary level, a middle school technology curriculum and a four-year sequence of high school courses that, when combined with college preparatory mathematics and science courses, introduce students to engineering and engineering technology prior to college.

See PROJECT on Page 10

Board sets timeline for hiring commissioner

The Kentucky Board of Education set the timeline for hiring the state's next commissioner of education during its Aug. 8 and 9 meeting in Frankfort. The board will begin reviewing applications Oct. 3 and select three to seven candidates.

Background and reference checks of the candidates should be completed by mid-October, when the board expects to announce the finalists. Interviews are set to begin Nov. 13

The position is being advertised in state and national publications. The criteria and

See BOARD on Page 9



First-year primary teacher Katie Sisk shows student Paige Powell how to use a placeholder to solve a multi-digit multiplication problem during class last spring at Rosenwald-Dunbar Elementary (Jessamine County).

Change in KTIP program designed to strengthen teaching and learning

By Rebecca Blessing

rebecca.blessing@education.ky.gov

What a difference a year makes! Twelve months ago, Katie Sisk was a novice teacher in a primary classroom at Rosenwald-Dunbar Elementary (Jessamine County).

Yes, she had done her student teaching. She had her education degree from the University of Kentucky. She had worked as a paraeducator. But nothing could adequately

prepare her for having her own class, she said.

As it turns out, Katie's first year was a success! Her students flourished and so did she – thanks at least in part to the Kentucky Teacher Internship Program (KTIP).

"KTIP challenged me to think critically and grow as a teacher," said Sisk.

State law requires all new teachers and out-of-state teachers with less than two See CHANGE on Page 9



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Bulletin Board



Bowling Middle School, Owen County

Bulletin Board is compiled by Rebecca Blessing rebecca.blessing@education.ky.gov

Conferences

Gifted education

Kentucky Association for Gifted Education's fall conference will be Sept. 26 in Lexington. It will focus on the special needs of talented readers and differentiated strategies to help them progress in reading. Contact: (270) 745-4301 or KAGE Web site

www.wku.edu/kage

Middle schools

The Kentucky Middle School Association's fall conference is Sept. 30-Oct. 2 in Lexington. In addition to practical professional development sessions, the featured presentation will focus on developing effective Individual Educa-

www.kmsaonline.com/pd/fallconf.htm

Math and Technology

The Kentucky Council of Teachers of Mathematics and Teachers Teaching with Technology (T3) joint regional conference is Oct. 19-20 in Lexington. Registration deadline is Sept. 30.

www.staff.fcps.net/bperry/t3conf2007

CounselingThe Kentucky Counseling Association's 50th annual conference will be held Oct. 23-26 in Louisville. Participants can earn 10 hours of continuing education units during workshops held Oct. 23-24 as part of the conference.

www.kyca.org/online

Health and Physical EducationThe Kentucky Association for Health, Physical Education, Recreation and Dance will hold its 2007 convention Oct. 24-26 in Louisville. This year's theme is "Dreams + Vision = Reality.'

www.kahperd.com/convention_dates.html

National dropout prevention

The 19th Annual National Dropout Prevention Network Conference will be held Oct. 27-31 in Louisville. Sessions will focus on reducing dropout rates and increasing gradu-

www.dropoutprevention.org/conferen/conferen. htm#2007_Conf

Science teachers

The Kentucky Science Teachers Association will hold its annual conference Nov. 1-3 in Lexington. Hands-on and other professional development sessions are planned.

www.ksta.org

School public relations

The Kentucky School Public Relations Association will hold its fall conference Nov. 8-9 in Owensboro. Registration information is online.

www.kyspra.org

"Charting the Course" is the theme for the Title I regional conference Nov. 11-13 in Owensboro.

www.grrec.ky.gov

Events

Autism strategies training

The Kentucky Autism Training Center is hosting workshops for families and professionals this fall at sites throughout the state.

Contact: Emily Kirkham, (502) 852-3597, elhatc02@ louisville.edu

Legislators Back to School ProgramMembers of the Kentucky General Assembly will par-

ticipate in the ninth annual America's Legislators Back to School Program by setting up visits to classrooms between mid-September and mid-November. Schools also can request visits from their legislators.

Contact: Sheila Mason, (502) 564-8100, sheila.mason@lrc.

www.ncsl.org/public/backsch.htm

Issues for gifted education leaders

Gifted education leaders are invited to a session Sept. 25 in Lexington sponsored by the Kentucky Association for Gifted Education and the Advisory Council for Gifted and Talented. Participants will examine Kentucky Department of Education initiatives, their impact on Kentucky's gifted students and the underachievement dilemma as it relates to gifted students.

Contact: (270) 745-4301 or KAGE Web site www.wku.edu/kage

Youth development seminars

Kentucky Child Now! and Community Collaboration for Children are hosting an interactive seminar in eight regions across the state for adults who work with young people. Dates and locations listed online. Pre-registration required. www.kychildnow.org

Kentucky Book Fair

The 2007 Kentucky Book Fair will be Saturday, Nov. 10, at the Frankfort Convention Center. Proceeds from book sales are donated primarily to school and public libraries throughout Kentucky.

www.kybookfair.org

Resources

Service-learning grantsThe State Farm Youth Advisory Board offers grants from \$25,000 to \$100,000 to P-12 service-learning projects that focus on financial education, access to higher education/closing the achievement gap, disaster preparation or driver safety. Submit applications electronically by Oct. 12.

www.statefarmyab.com

Arts Council grants for teachers

The Kentucky Arts Council has posted its Teacher Initiated Program grant guidelines and applications online. This program enables teachers to bring professional artists into their classrooms for residencies that give students hands-on experience in the arts. Intent to Apply due on or near Sept. 15, application deadline Oct. 15.

 $http://artscouncil.ky.gov/guide/prog6/tip_guid.htm$

NASA classroom training

Learn through interactive online sessions to teach science content in the context of the STS-118 shuttle mission, the first educator astronaut space flight. Educators can take the training from home or work. Registration is open until Oct. 15.

www.us-satellite.net/sts118

Teacher exchange program

Teachers with at least three years of full-time experience can apply for the Fulbright Teacher Exchange Program. Sixweek to one academic year exchanges are available. Application deadline for the 2008-09 school year is Oct. 15.

www.fulbrightexchanges.org



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Interim Commissioner of Education KEVIN NOLAND

Director, Division of Communications

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Commissioner's Comments

Noland

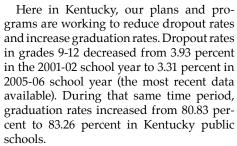
Keeping students in school until graduation pays big dividends for them and Kentucky

By Kevin Noland

Interim Commissioner of Education

Reports in several education publications this summer focused on keeping high school students in school through graduation. Adequately preparing students for postsecondary studies and the workplace recently has garnered headlines because of the federal No Child Left Behind Act requirement that holds states and schools accountable for graduation rates.

The national publication, "Education Week," released its report, "Diplomas Count 2007: Ready for What? Preparing Students for College, Careers and Life After High School." According to the report, more than 1 million American students did not graduate from high school on time with at least a standard diploma last school year. As a result, their job opportunities in this globally competitive job market are minimal and very likely will pay salaries at or just above the poverty



While Kentucky public schools are making improvements, we still have work to do. This summer's reports remind me that we must continually fine-tune the work in our public schools to make certain that every student - regardless of race, gender, geography, family income or diverse learning need – is achieving at high levels and on track for graduation.

For the past several years, we have focused public middle and high schools on restructuring the way they prepare students for college, careers and life after high school. These secondary schools are working to increase rigor in academic content, to provide real-world relevance to classroom work and to build relationships that support students in their quest to complete

Kentucky expects our secondary schools to reduce the dropout level to zero, to guarantee that every student will be ready for the next level of learning without the need for remediation and to equip every student with a plan that ensures lifelong learning opportunities.

The Individual Learning Plan (ILP) helps students in grades 6-12 better focus their middle and high school work as they prepare for postsecondary studies and careers. ILPs can be comprehensive files for students and their parents to use in making sure each young person is prepared to achieve his or her personal goals.

What does 'ready' mean?

One part of the "Education Week" report asks, "What Does 'Ready' Mean?" Are public schools preparing some students for work and others for college? Or are we preparing all students for both college and work?

If we are to prepare students for the 21st century workplace, I believe the answer must be both. Today, a high school diploma is the minimum level of education needed to enter jobs that pay wages that will make a young person self-sufficient. However, it

may not be a job that will support a family.

This is not what we, as educators, want for our students. Watching students choose the path that leads to low-paying jobs cannot be what we, as Kentuckians, want for our state's future.

The reality of the future for Kentucky's young people is that they must have some postsecondary studies to get a decent job that pays a decent

wage. To qualify for high-level, high-paying positions, students will need at least a bachelor's degree and high-level job skills.

And there is no way to predict what further education and skills today's students may need to hold that job for 20 or 30 years.

We know that today's students will need a mix of academic and nonacademic skills

to get and keep jobs in the 21st century. According to the Southern Regional Education Board (SREB) 2007 "Fact Book on Higher Education," over the next 20 years the fastest-growing jobs in Kentucky and the 15 other Southern states that make up the SREB will require postsecondary training or college degrees.

Likewise, the fact book says changes must be made in public education to improve the education levels of many African-American, Hispanic and low-income youth and young adults. We must continue to close the achievement gaps between these student populations and their peers.

If changes don't occur, the fact book predicts that by the year 2020 the 16 SREB states will have a higher percentage of working-age adults without high school diplomas than now. The report also predicts there will be a lower percentage of adults with a high school diploma, a GED credential, some postsecondary training or an associate's degree than today and that there will be no increase in the percentage of adults with bachelor's or higher degrees than now.

We know that an educated and skilled work force will attract and retain the highlevel businesses and industries that can provide economic advancements for Kentucky. If we cannot convey the importance of education and lifelong learning to young Kentuckians, they will relegate themselves to low-paying jobs and negatively affect Kentucky's economic future.



Plenty of data support the relationship between education achievement and pay. According to 2005 data from the U.S. Census Bureau, an adult with less than a 9th-grade education earned an average annual salary of \$20,300 at jobs that require little training or previous experience.

An adult with a high school diploma or GED credential earned an average of \$31,700 in 2005. Adults with bachelor's degrees earned an average of \$56,700, and adults with professional degrees (doctors, lawyers, engineers and architects) earned an average of \$119,300 in 2005.

As educators, we must prepare high school students for the higher-paying jobs that offer future growth. We must set high expectations for students to achieve academic and workplace skills.

Every level is important

Teachers at every level must be involved in preparing students for success. Elementary schools are as responsible – if not more responsible - than secondary schools for student success.

Teachers in primary and intermediate grades lay the foundation for learning and achieving at high levels. If students are well prepared – reading on or above grade level and achieving in mathematics courses they are more likely to persist to high school

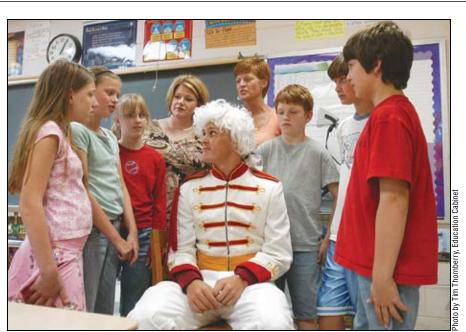
Secondary teachers must keep students interested in learning and on track for grad-

In its report, "Keeping Kids in School: Lessons from Research about Preventing Dropouts," The Center for Public Education outlines four components of a comprehensive plan in secondary schools to raise graduation rates. The components involve:

- prediction learning to identify students who are likely to drop out
- intervention knowing what to do for high-risk students once they are identi-
- prevention learning to minimize the risk factors through school environment
- recovery finding success for students who "fall through the cracks"

We must keep our students' eyes on the prize – a diploma and being proficient and prepared for success. We must do what it takes to keep our students in school and learning so they can find jobs that will allow them to be self-sufficient and help keep Kentucky's economy strong.

(To comment on this topic, contact Interim Commissioner Noland at kevin.noland@educa-



Constitution Day observance

Fifth-grade students at Lancaster Elementary, Kim Denton, left, Hannah Johnson, Megan Ward, Casey Suddarth, Austin Sebastian and Gary Rounsifer, ask questions of Garrard County High School student Hunter Hensley as he rehearses his part as George Washington for the schools' third annual Constitution/History Day on Sept. 17. Sherrie Johnson, back right, Social Studies Department chair at the high school, has students in her 10th-grade Government classes create core content-aligned presentations to the 5th-graders to teach them about the U.S. Constitution, the signing of the Declaration of Independence, important historic figures and the culture from the country's founding years. Johnson and Sarah Yantz, back left, 5th-grade teacher at Lancaster Elementary, and teachers in the district's other elementary schools collaborate on schoolwide activities focused on the Constitution and American government.

MORE INFO ...

www.sreb.org www.edweek.org www.centerforpubliceducation.org

'KIDS' will help teachers guide student learning

By Matthew Tungate

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In 2009, teachers across the state should be able to go to their computers and see if their students' brains are "empty," "full" or somewhere in between. Rather than looking at a spreadsheet of testing data, teachers will have the option of looking at a visual display of assessment data – such as line or bar graphs, or even a digital vehicle fuel gauge – through the Web-based Kentucky Instructional Data System (KIDS).

From this user-friendly overview, teachers will be able to "drill down" to get more detailed information, said Robert Hackworth, product manager for the KIDS project. "I really want it to be engaging at every level," he said.

In 2005, Kentucky was one of 14 states to receive a three-year grant to design, develop and implement a statewide longitudinal data system. Kentucky received the largest award, \$5.8 million.

The project goal is to provide Kentucky educators with a user-friendly tool to access information that will inform their delivery of individualized instruction to every student, Hackworth said. It also will make No Child Left Behind reporting easier.

"We wanted to create a system that would focus on instruction for students and educators, and then also be able to do the reporting," Hackworth said. "We expect it to actually decrease the burden on teachers and school staff."

Educators throughout the state will have access to key learning indicators to track improvement at all grade levels and for all students over time. Educators will be able to watch the progress of a student's school career unfold year by year on their computer screens.

KIDS should be implemented statewide during early 2009, Hackworth said, although the ability to analyze CATS assessment and student demographic information may be available sooner. The Kentucky Department of Education and district staff are developing KIDS training for teachers, he said.

Barren County, Daviess County, Johnson County, Fayette County and Wayne County school districts are reviewing KIDS and giving feedback, Hackworth said.

Much of the information is already available, but analyzing it in meaningful ways can be difficult at the student, school and district levels, said Benny Lile, director of Instruction and Technology for Barren County Schools. KIDS will contain many packaged reports to help analyze that data, he said.

"For the folks that really want to dig in, they'll be able to do that," Lile said. "Like I tell people about gym membership – you've got to use it. It will still be up to us to get out there and work."

He noted that KIDS should help districts reach transient students better, as educators will have a greater degree of awareness about students' backgrounds.

Hackworth said the state has been good about providing data, but KIDS allows educators to use that information more efficiently.

"Previously, we are able to see a student captured in time," Hackworth said. "With this system you'll be able to see a student's, a school's, a district's or the state's progress over time. This just makes the data more easily available to teachers, principals and others in education."

And that's the way Hackworth wants it. He uses his Aunt Dianna Hunsucker, a retired teacher in Floyd County Schools, as his mental barometer.

"Keep the teacher in mind," he said. "If it doesn't pass my 'Aunt Hunsucker test,' then we're going down the wrong road."

Hackworth has additional plans for KIDS. At some point, students and parents may be able to access certain information via KIDS to get feedback on individual student progress.

Another aspect of KIDS, called the Knowledge Management Portal,

MORE INFO ...

Robert Hackworth, (502) 564-4474,

www.education.ky.gov - Click

on "Instructional Resources" in the

menu bar near the top of the page,

scroll down and select "Kentucky

Instructional Data System."

robert.hackworth@education.ky.gov

may be funded by the legislature for implementation after 2009, Hackworth said. A teacher will be able to submit a query through the KMP to find instructional resources specific to a learner's needs.

KMP eventually will replace "Teaching Tools"

on the Department of Education Web site and offer curriculum documents, instructional resources, standards-based units of study and banks of content-specific test items.



Learning to be technology leaders

Student Technology Leadership Program (STLP) members and staff at the Kentucky School for the Deaf work one-on-one with other students on a computer project. From left, Andrew Morgan, Austin Bridgeman, Lisa Morse (STLP coordinator for the school), Heather Johnson, Brittany Renfrow, Mary Beth Gay (school library media specialist), Tyler Epley, Sierra Saylor and Andrew Redding collaborate as they work on the assignment. A donation of computers from the Bluegrass Community and Technical College's Danville campus is helping the school's recently organized STLP program and all students become more computer savvy, Morse said.

Primary students increase reading skills through federal Reading First initiative

Reading First in Kentucky, a systemic approach to dramatically improve early literacy for the 18,538 primary students enrolled in this initiative, shows that steady gains are being made after only three years of implementation.

All 73 Kentucky schools involved in this six-year federal initiative have shown growth in reading from fall 2004 – when the initiative began – to spring 2007, according to results from the Group Reading Assessment and Diagnostic Evaluation (GRADE). The GRADE assessment is used to test reading skills of students in Reading First schools.

In the fall of 2004, the number of students reading on or above grade level in these schools was 5,593 students, or 30.1 percent. The spring 2007 testing data indicates that 13,199 of the students, or 71.2 percent, are reading on or above grade level.

The increase more than doubles the number of students reading on or above grade level in 2004 and represents students in all demographic groups. The goal of the Kentucky Reading First schools is to have all children learn to read on or above grade level by the end of primary.

Just three years into the grant implementation, 36 schools have met the goal of having 75 percent or more of the students reading on or above grade level. (See the box for a listing of those schools.) Data

show an additional 36 Reading First-funded schools with at least 50 percent of their students reading on or above grade level.

As part of the initiative, teachers and principals in the participating schools receive professional development training. School-level reading coaches work collaboratively alongside classroom teachers to offer specific instructional strategies and feedback to teachers and provide hands-on lit-

eracy leadership.

More information about Reading First can be found on the Kentucky Department of Education's Web site.

MORE INFO ...

www.education.ky.gov – Click on "KDE QuickLinks" in the left-hand menu, scroll down and select "Reading First."

Reading First schools with 75 percent of students reading on or above grade level

Boyd County: Catlettsburg Elementary; **Boyle County**: Junction City Elementary and Perryville Elementary; **Breathitt County**: Highland-Turner Elementary; **Caldwell County**: Caldwell Primary School; **Christian County**: Pembroke Elementary;

Clay County: Goose Rock Elementary; Danville Independent: Hogsett Elementary and Toliver Elementary; Elliott County: Isonville Elementary; Fayette County: Booker T. Washington Academy and Deep Springs Elementary; Fleming County: Ewing Elementary:

Garrard County: Lancaster Elementary; Hickman County: Hickman County Elementary; Hopkins County: Earlington Elementary; Jackson County: McKee Elementary and Tyner Elementary; Jefferson County: Dixie Elementary; Letcher County: Martha Jane Potter Elementary; Lewis County: Lewis County Central Elementary;

Lincoln County: Crab Orchard Elementary and Highland Elementary; Livingston County: North Livingston County Elementary; Martin County: Eden Elementary; Morgan County: East Valley Elementary and West Liberty Elementary; Owsley County: Owsley County Elementary;

Pike County: Bevins Elementary, Blackberry Elementary, Feds Creek Elementary and Kimper Elementary; **Pulaski County**: Burnside Elementary and Nancy Elementary; **Raceland-Worthington Independent**: Campbell Elementary; and **Robertson County**: Deming Elementary

Center provides resources for visually impaired students

By Matthew Tungate

matthew.tungate@education.ky.gov Cindy Adair, like many classroom teachers across Kentucky. has some students who are auditory learners and others who learn better from textbooks. But

affording textbooks for her students with visual impairments in Hardin County can be difficult when one new Braille book may cost up to \$5,600 and require 50

"We shudder every time a new textbook is adopted because we know it is going to take forever for someone to translate that

volumes.



textbook," she said. "It's a huge expense."

The Kentucky School for the Blind's Kentucky Instructional Materials Resource Center (KIMRC) in Louisville makes the task much easier for Adair and educators like her throughout the state.

KIMRC provides students who are blind or visually impaired with Braille and largeprint textbooks and specialized

instructional materials such as Braille writers, electronic notetaking devices, bold-line and Braille paper, and tactile globes. From March 2006 through February 2007, the resource center distributed more than 2,470 textbooks and more than 3,500 educational aids to 656 students in 138 public school districts, according to KIMRC Office Manager Mary Ellen Smith.

The resource center administers the state textbook program for children with impaired vision who are attending public school and the federal quota program,

which provides supplies, textbooks and other material for students who are legally blind and attending a public or a private, nonprofit school. The resource center also

conducts an annual registration of students who are blind or visually impaired in Kentucky, Smith

The resource center moved into a renovated area on the first floor in the Scoggan classroom building on the Kentucky School for the Blind campus in Louisville earlier this year. The center houses 922 copies of Braille textbooks that total 11,800 volumes and 3,165 large-print textbooks

Ginger Barnes, a teacher of visually impaired students and Adair's co-worker in Hardin County, said the KIMRC now has more storage space for materials and an improved inventory-management system. She said 90 percent of her materials come from the resource center, which will order what it doesn't have.

"I could not teach children with visual impairments without KIMRC," Barnes said.

Most students who are visually impaired or blind are taught in their local school districts, so the accessibility of materials through the resource center is important, Adair said.

"In just about every part of the curriculum, there is something that is accessible to our kids," she said. And keeping students who are visually impaired or blind in their local districts is good for everyone, she added.

"They learn a lot from their peers, and their peers learn a lot from them," she said.

MORE INFO ... www.ksb.kyschools.us/ Resources/KIMRC.htm

Mary Ellen Smith, (502) 897-1583, Ext. 219, maryellen. smith@ksb.kyschools.us



Paula Penrod, public relations coordinator at the Kentucky School for the Blind (KSB), front left, shows fine motor development kits to Ginger Barnes, teacher of the visually impaired (TVI) in Hardin County Public Schools; Robbin Cox, TVI in the Paducah Independent district; Debbie Peck, special education teacher at Morgan Elementary (Paducah Independent); and Cindy Adair, TVI at Mulberry Helm Education Center (Hardin County), at the KSB's Kentucky Instructional Materials Resource Center. The center was recently renovated to improve its efficiency in providing materials to blind or visually impaired students in classrooms throughout the state.

'Literacy Without Limits' is new adolescent reading resource

Adolescent literacy experts report that nearly three-quarters of adolescents struggle in some manner with reading and writing. Now more than ever, teachers in all content areas must know how to provide differentiated instruction that will help their students attain the literacy skills they need to access and understand the cur-

"Literacy Without Limits" is a new multimedia professionaldevelopment resource produced jointly by Kentucky Educational Television (KET) and the Kentucky Department of Education. Available on DVD and the Web, "Literacy Without Limits" is designed to be a helpful, non-intimidating and immediately useful resource for teachers.

Effective instruction is illustrated in authentic classroom video segments. Kentucky teachers featured in the videos provide insight into their planning, pedagogical reasoning and expectations for each lesson.

The videos are further supported by an explanation of the key practices educators will observe in the video segments and by Web

links to the lesson materials. All the videos include a closed-captioning option.

"Literacy Without Limits" features more than 90 video



segments that offer strategies for teaching reading:

- to students with identified literacy needs, including those with and without Individual Education Plans
- to students struggling with a wide range of literacy needs comprehension, decoding and fluency
- in a variety of classroom settings general, heterogeneous, collaborative and resource classrooms
- using lessons in multiple content areas, including English/lan-

guage arts, forlanguage, mathematics, science, social studies and U.S. history

MORE INFO ...

www.literacywithoutlimits.org www.ket.org/education/professional www.education.ky.gov

"Literacy Without

Limits" is free to all schools. Multiple copies of the DVD version are being mailed to every Kentucky public school early this school year. A link to the Web version is posted on the KET and Department of Education Web sites.

Kentucky teachers help design online Kentucky Proud Lessons

Kentucky teachers have written and pilot-tested Kentucky Proud Lessons, which use agriculture to teach mathematics, history, geography, economics, science, social studies and practical living to exiting primary through 5th-grade students. Each lesson plan includes Academic Expectations, the lesson's alignment with the Program of Studies and Kentucky's Core Content for Assessment and teacher resources.

The Kentucky Department of Agriculture worked with teachers throughout the state to develop the lessons. Kentucky Proud Lessons are posted on the Agriculture Department's Web site.

While students use agriculture to learn in different content areas, they discover how agriculture works in today's complex, interdependent world. One lesson teaches how farmers use global positioning

system technology to save money. Another lesson shows ways Kentucky farmers mar ket their products.

Still other lessons agriculture

MORE INFO ... www.kyagr.com/marketing/ ageducation/Kentucky ProudLessons.

careers, risk management on the farm, the importance of farmland preservation, the risks of farming and environmental issues related to agriculture. A block of five lessons teaches the relationship between geography and agriculture.

Read and Discuss

'The Color Is Black' offers a seasonal scare for teen readers

Reviewed by Sue Bowen

Barren County Public Schools

Looking for a seasonal scare to read with your intermediate or middle school students? "The Color Is Black" by Dwayne Fuchs-Rice is just the book for you and your class to read this fall.

The suspense/mystery explores friendship among four 14-year-old boys – Benjamin, Noah, Isaac and Adam. It also looks at the friendship of their fathers, all widowers, who have been best friends since childhood.

The high school freshmen find more than they bargain for while doing a history class project about witches and Halloween. As they begin research for the assignment, Isaac discovers a book hidden in his attic in his dad's mementos. The book contains witches' spells and rituals, including a friendship ritual that their own fathers performed when they were younger.

Like all curious teens, the boys decide to perform the friendship ritual as part of research for their school project. The ritual is supposed to bind them together by loyalty and protect them from evil as long as they remain friends. Unknowingly, the boys set into motion a series of mysterious, sometimes supernatural, occurrences. A secret from each boy's past resurfaces to lead the four friends on a journey that not only will change their futures but reveal their pasts.

As people around the boys begin to die – and the bodies start piling up – the suspense builds. As the boys and their fathers become immersed in the dark deeds that are occurring in their community, teen readers

will be certain of only one thing: the color is black!

Fuchs-Rice, an exceptional education teacher at Austin Tracy School (Barren County), wrote this book for readers ages 10 and older, but especially with male readers in mind. Publicity for the book entices boys to read it by saying, "This isn't your daddy's cowboy novel ... Real men read."

Fuchs-Rice draws on the world he knows, setting the story in the fictional rural community of Chipwood, Ky. He places his four main characters in real-life situations that many teenage boys face growing up in today's world. He also adds enough of the supernatural to keep readers on the edges of their seats.

I work in the same school as the author. I chose to use his book as a read-aloud to fill in transitional periods in my classroom last October. My students loved being left hanging in suspense at the end of each chapter, and I was thrilled to overhear them talking at lunch and during locker changes as they tried to predict what was about to happen to each of the characters. This thriller captivated my 6th graders!

The book does contain content about a physical attack on one of the main characters. However, Fuchs-Rice tactfully deals with the event and focuses on the character's feelings about keeping the secret of being assaulted and the fear he has of sharing it with his friends.

This book lends itself to a powerful classroom discussion of how a victim must deal with an assault and the freedom that comes from telling the truth and not allowing fear to overcome a victim's life. Reading this book aloud in class proved to be very educational for my students.

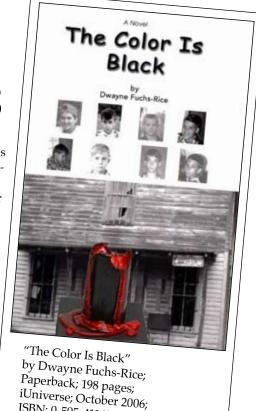
They were able to openly discuss their feelings that a child is not at fault when assault or abuse occurs to him or her. My students decided that getting out the word about any abuse could help potential victims.

I chose to read this book aloud to my 6th graders so that I could control these discussions and maintain a proper climate in my classroom as we read. The combination of meaningful content, along with a little seasonal spookiness, made this book a thrill to read to my students!

Since Fuchs-Rice works in our school, I invited him to my class. He spoke with my students and shared his

pourney as a writer with them. His poetry has been published, and he is a songwriter. His second book, "Troika," has just been released, and students are already asking for a promised read of this next adventure!

For more information about "The



Color Is Black," contact Fuchs-Rice at the colorisblack@yahoo.com.

ISBN: 0-595-41169-X

Sue Bowen is an intermediate teacher at Austin Tracy Elementary (Barren County). She can be reached by e-mail at sue.bowen@barren. kyschools.us.

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Have you read a book or professional article, used new software or visited a Web site you'd like to recommend to other educators? If so, you can reach nearly 54,000 teachers, administrators and education stakeholders by submitting a review of the resource to *Kentucky Teacher* for publication.

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Kentucky ACT scores move up for 5th consecutive year

By Lisa Gross

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The average composite ACT score for Kentucky's year 2007 college-bound high school seniors gained slightly over the 2006 composite score, according to data released by the Kentucky Department of Education and the Council on Postsecondary Education in August.

The 2007 composite is 20.7, compared to 2006's composite of 20.6. Nationally, the 2007 composite score was 21.2, a gain of 0.1 from 2006.

In 2007, 30,929 (77 percent) Kentucky public and nonpublic high school graduates took the test, compared to 1990 when 24,942 Kentucky graduates (62 percent) did.

ACT asks test-takers to report the courses they took in high school. Over the past 17 years, there has been a dramatic increase in the percentage of Kentucky students reporting that they are taking ACT's recommended core courses.

The number of students who report

taking ACT's core curriculum has increased by more than 10,000 students since 1990. In 2007, 58 percent of Kentucky high school students who took the ACT said they also took the recommended core courses. However, that percentage likely is higher due to differences in course names and non-completion of surveys, department officials said.

The overall ACT Assessment consists of tests in four areas: English, mathematics, reading and science reasoning. ACT recommends that college-bound students take four or more years of English; three or more years of mathematics (including algebra 1, algebra 2 and geometry); three or more years of social studies; and three or more years of natural sciences. ACT defines specific courses in these areas.

Kentucky's graduation requirements define four credits in English; three in mathematics; three in social studies; three in science; one in history and appreciation of visual and performing arts; and one-half each in health and physical education.

"The ACT results are valuable because they provide another means for Kentucky's secondary educators to focus attention on specific areas," said Interim Education Commissioner Kevin Noland. "Kentucky's students are making progress, and that is most evident when we look at long-term trends. The latest data do provide some concern in the performance of some groups of students in the state. It's imperative that we and the state's high school educators continue to turn our energies toward closing the achievement gaps."

African-American students in Kentucky who took the college-bound curriculum performed similarly to African-American students at the national level. At both the national and state levels, the gap between the performance of African-American and white students persisted.

Over the past few years, the numbers of non-white students taking the ACT in Kentucky have risen. According to ACT, increases in student populations taking the test can lead to a drop in scores.

The composite score gaps between males and females of all ethnic groups in Kentucky were minimal in most subjects, with males posting a composite score of 20.8 and females a score of 20.5. On ACT, which offers only multiple-choice questions, males tend to outscore females in mathematics and science, and females tend to outscore males in English and reading.

Many Kentucky colleges and universities use ACT scores to inform admissions decisions and to place students in appropriate college courses. ACT scores also are used, along with high school grade point averages, to determine the amount of money high school graduates are eligible to receive through the Kentucky Educational Excellence Scholarship program.

In comparing Kentucky with the nation, the widest gap in performance among students was in overall mathematics scores (1 point) and the smallest was in reading (0.3 point).

CEO in Economics teaches business of life in classrooms

By Margaret Schauer

Kentucky Council on Economic Education

Despite the 12 years of business and marketing experience that she brought to her career in education, Kelly Gillum, a seven-year business and marketing teacher at Mayfield High School (Mayfield Independent), was compelled to learn even more about economics.

"I cover many economic topics in my business and marketing classes but I always felt like I needed to cover more," Gillum says. "I had one economics course in my undergraduate program and not any economic courses in my graduate program. I always felt that economics was an important but difficult subject, and I knew that I needed more education myself in that area to effectively and comfortably teach my students."

In 2006, Gillum was introduced to an opportunity that would allow her to focus on economic education while enrolling in a rank-change program: the Kentucky Council on Economic Education's (KCEE) Continuing Education Option (CEO) in Economics Scholarship program.

KCEE, a 33-year-old nonprofit organization that champions the teaching and learning of economics in the classroom, created the CEO in Economics Scholarship program as an opportunity for P-12 teachers using the Education Professional Standards Board's Continuing Education Option (CEO) for rank change and certificate renewal. The CEO program is designed as an alternative to a 5th-year (Rank II) or 6th-year (Rank I) program college course of studies.

KCEE CEO Scholarship candidates can receive a \$1,000 scholarship for fee reimbursement, classroom materials and travel stipends. Scholarships are granted based on merit and geographic cohort.

As part of the EPSB's CEO program,

nomic education as a concentrated content area. The CEO program may be completed in as few as 12 months but in no more than four years.

The CEO program is based on the Kentucky Experienced Teacher Standards adopted by the EPSB. The program mandates that candidates submit an independent professional growth plan based on the needs of the teacher, the students and the school. Structured in four phases, the CEO program involves building a professional development plan, content readings and research, classroom implementation and student assessment, and professional leadership and publication, according to

While the KCEE CEO program is based on self-directed learning, participating teachers receive assistance through online resources, through discussion with regional cohorts, and via support from experienced teacher "coaches."

KCEE President Jan Mester says, "The CEO in Economics program is a creative approach to having more economic educators in the classroom. It's the multiplier effect ... one economic educator plants the seeds of economic literacy and potentially impacts thousands of Kentucky students."

CEO in Economics Coach (and program graduate) Dawn Smith asserts that the CEO in Economics program benefits teachers, students and schools.

"So many Kentucky educators have had very limited experience with economics in their undergraduate programs," says Smith, a former Kentucky classroom teacher who now works for a history curriculum vendor. "They often find themselves in a classroom as first-year teachers responsible for teaching economics concepts without having

enough of the coursework to feel comfortable with the area themselves. By focusing on economics through the CEO program, teachers across the state have an opportunity to become proficient in this subdomain themselves, which, in turn, will lead to increased student performance in an area where many schools struggle."

Teresa Moore, a 5th-grade teacher at Stonewall Elementary School (Fayette County), is a CEO participant focused on intermediate social studies and integrating economics into history.

"Many of the economic terms within the social studies curriculum are now 'embedded' within historical time periods," Moore says, referring to changes made in 2006 to the Kentucky Core Content for Assessment, version 4.1. "This was important for my students as they seem to have an understanding of economics as it pertains to them today. However, (they) have a more difficult time applying that knowledge to different time periods throughout history.

"It's important for me because I know I need to do a better job of integrating economic concepts. ... Having a deeper understanding of how economics impacted explorers, frontiersmen, pioneers and immigrants should better prepare students for what they are expected to know."

Gillum says that having a greater understanding of economics for herself will increase her students' knowledge and excitement. "Real-world examples that I can give will let students see the economics connections in their lives as well as with other subjects that they have studied or will study," she says. "I have so many helpful resources (from the KCEE CEO program) that I can focus on specific economic subjects for Kentucky. I think that will really give students the at-home feeling and the way to see how

things affect them here in their home state, as well as what is happening in our country. I think that we will see improved test scores in economics as well as other areas."

Bobbi-Lynn Thompson, CEO graduate who achieved her Rank I and II through the program, applauds the wealth of knowledge available to teachers who enroll in the CEO in Economics program. She is a teacher at North Hardin High School (Hardin County).

"The great thing about KCEE's CEO in Economics program is that I learned so much about economic education that I never knew existed, resources that help teach economics," Thompson says. "It opened so many doors for me."

Like Thompson, Smith

believes that her experience in the CEO program had many benefits beyond rank change. "The CEO requirements allowed me the opportunities to network with economics educators, attend valuable professional development workshops and seminars, and – for the first time – I felt truly prepared to teach economics concepts to my students," she explains.

Moore encourages teachers to embrace teaching economics. "Don't be afraid," she says. "Of all the subjects I have taught, economics is the most fun for both the students and me. ... If you need a rank change, sign up for the CEO program and apply for a scholarship through KCEE. It's a wise, economic choice!"

Margaret Schauer is communications director for the Kentucky Council on Economic Education. She can be reached at (502) 267-3570, toll free at (800) 436-3266, or margaret@econ.org.

> MORE INFO ... http://econ.org/teachers/CEO

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KCEE CEO Scholarship teachers, Kelly Gillum, a business and marketing teacher at Mayfield (Independent) High School, seated, and Teresa Moore, a 5th-grade teacher at Stonewall Elementary (Fayette County), examine classroom resources available through the CEO in Economics program.

Kentucky teachers validate student performance standards

By Rebecca Blessing

rebecca.blessing@education.ky.gov

They may not have had sweaty palms or nervous jitters, but there may have been a little anxiety as some 300 Kentucky teachers sat down to take the Kentucky Core Content Test (KCCT) this summer.

The teachers took the test to become familiar with test items before validating student performance standards of novice, apprentice, proficient and distinguished for 28 of the 29 subject/grade-level tests that make up the KCCT. Standards for 12th-grade on-demand writing will be reviewed this fall.

"It is so critical to have Kentucky teachers involved in the process," said Tim Crockett, vice president of Measured Progress, the state's testing contractor. "They know the content standards, and they know Kentucky kids and how they perform."

Need for validation

The National Technical Advisory Panel on Assessment and Accountability (NTAPAA), which advises the Kentucky Board of Education on testing issues, recommended the performance-standards review after changes were made recently to components of the Commonwealth Accountability Testing System (CATS). The previous student performance standards were established in June 2001.

"We have a new core content, version 4.1, so we've had some changes in our content standards; we've had some changes in our actual test design and we've added tests in reading and mathematics at different grade levels to conform with the No Child Left Behind Act (NCLB). With all these changes, it was time we revisited our performance-level standards," said Rhonda Sims, director of the Division of Assessment Support with the Kentucky Department of Education.

"The experts and national technical panel typically say that every seven to eight years you should reevaluate and revisit your standards, even if you haven't had change. But, obviously, we've had enough change in the system so we felt we really needed to look at our standards again," added Sims.

Standards validation process

Educators from the majority of the state's 174 school districts participated in the standards-validation process under strict

confidentiality not to divulge the test questions or talk about the process. For two days they worked in small grade- and contentspecific groups.

"We create an ordered-item book-let for each grade and subject tested," explained Crockett of Measured Progress. "All of the questions on that particular test are put in order from easiest to hardest. First, the teachers



Jefferson County Reading Specialist Laura Pinkerton, left, checks off student performance descriptors as Instructional Coach Beth Long, also from Jefferson County, places a marker in an ordered-item booklet during a session of the standards validation process.

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Clay County Middle School language arts teacher Joan Hobbs joins the discussion on setting cut points for student performance standards during the standards validation session this summer. Teachers validated the standards for novice, apprentice, proficient and distinguished levels on 28 of the 29 subject/grade-level tests that make up the Kentucky Core Content Test (KCCT). Standards for 12th-grade ondemand writing will be reviewed this fall.

look at each of the items on the test and determine what an item measures and try to define why a particular item is harder than the ones before it and easier than the ones after it."

Next, according to Crockett, teachers worked in groups to discuss the performance-level descriptors and develop definitions of "borderline" apprentice, proficient and distinguished students. For each test item, the groups then had to answer the question, "Would at least two out of three students who demonstrate skills at the 'borderline' of this performance level correctly answer this question?"

"It is the job of Kentucky teachers to decide where along that continuum to put a cut point that best matches the performance-level definitions," Crockett said.

Using what's called the bookmark method, educators place three "bookmarks" between test items in the ordereditem booklet. These markers indicate the point at which a student would usually have the knowledge, skills and abilities to answer the questions to that point correctly for the performance-level category.

For example, in 5th-grade mathematics, test items 1-5 might correspond to the novice level, items 6-10 could represent the apprentice level, items 11-14 might reflect the proficient level and items 15-20 could more than likely be answered correctly only by distinguished-level learners.

"Though we did not have to reach consensus, it was confirming to see how close we all were with our choices of the cut points," said Jefferson County Elementary Reading Specialist Laura Pinkerton.

Since this was standards validation rather than a standards-setting process like teachers performed in 2000-01, Measured Progress had already set cut points based on how students scored on each test over the past four years. In the case of new tests, data was extrapolated to estimate 2007 scores. Teachers could recommend changes to the cut points, but the rationale for any changes had to be based on the performance-level descriptors and the actual test items.

Applying new standards

"Once we know where those cut points are, we can take the student work that's been scored and apply the new standard cuts to those scores. That tells us which performance category a student is in," said Sims, who works with assessment support. "The Commonwealth Accountability Testing System uses the percentage of students in a category to calculate, with a weighting system, a school's index in a particular subject."

KCCT scores from tests students took last spring are scheduled for release Sept. 26. The scores will reflect the validated student performance-level standards.

Benefits for everyone

Having teachers involved in the standards-validation process "takes the mystery away," said Sims. "Just understanding how the process works, where these cuts come from, how they're applied, that teachers were involved in making the decisions

– I think all that is very empowering for teachers."

Teachers participating in the standards validation agree the entire experience was enlightening.

"In addition to learning the actual standards validation process, the best thing was having the opportunity to meet teachers from other districts and sharing insights regarding student learning," said Jefferson County Instructional Coach Beth Long.

"The open discussion between teachers from across the state was great," added Joan Hobbs, a language arts teacher at Clay County Middle School. "It is wonderful to realize that we all share the same concerns, successes and ideas."

"I found the group discussion of the performance-level indicators very interesting," said Nan Ternes, a 7th-grade language arts teacher at Henderson County North Middle School. "As a result, we all felt like when working with our students throughout the year, we would be more aware of what it would take for them to move to the next level."

2007 Kentucky Core Content Test items released

The Kentucky Department of Education has released test items from the spring 2007 Kentucky Core Content Test (KCCT). These are the first test items based on the new Kentucky Core Content for Assessment, version 4.1, to be released.

The released items provide teachers and students with examples of the kinds of questions asked on the KCCT. Students can practice with the different formats of items found on the test.

"In the grades where we just added tests, we didn't have enough test items to be able to release," said Rhonda Sims, director of the Division of Assessment Support, Kentucky Department of Education. "But they will be targeted for future release."

This fall, Phase II of the release will include examples of annotated student work. According to Sims, this is the first time that work will be released in the student's actual handwriting.

"It shows how they constructed their answers and actually put it on paper," said Sims.

"I think seeing genuine student work rather than a transcript of their answers brings a new understanding of the accountability process."

The 2007 released test items are on the department Web site at: http://education.ky.gov/JumpTo/?jump=2007KCCTRelease.

BOARD from Page 1

position description also are posted on the Kentucky Department of Education's Web site (www.education.ky.gov). Educators and

the public can share their thoughts about selection of the next Kentucky Commissioner of Education online at http://education.ky.gov/ FormServ/?ID=NextCommissioner.

In July, after Illinois educator Barbara Erwin accepted and then declined the position, the board voted to reappoint Deputy Commissioner Kevin Noland as interim commissioner until the new commissioner is hired.

Joe Brothers, who replaced Keith

Travis as chair of the board during the August meeting, encouraged candidates to apply for the position. "We're making



Brothers

the commitment that this board will leave no stone unturned until we find a commissioner that is worthy of our state," Brothers said.

The board also took the following actions:

- re-elected Bonnie Lash Freeman as vice chair of the board
- approved the appointment of three new mem-

bers to the Kentucky Writing Program Advisory Committee: Denise Henry of Cumberland Trace Elementary (Warren County); Sherry Ederheimer, an English resource teacher for Jefferson County; and Artavia Acklin of Clear Creek Elementary (Shelby County)

- gave final approval to 704 KAR 4:020, which deletes a requirement for a tuberculin skin test for school district employees in favor of a tuberculosis risk assessment developed by the Kentucky Department of Health
- gave final approval to 702 KAR 5:080, which makes the tuberculosis protocol developed by the Kentucky Depart-

ment of Health consistent for all school employees

The board met Sept. 5 in Louisville for a tour of programs in Jefferson County Public Schools. The next board meeting in Frankfort will be Oct. 3 and 4.

MORE INFO ...
www.education.ky.gov – Click on "KDE QuickLinks" in the left-hand menu and select "State Board of Education."

http://education.ky.gov/ FormServ/?ID=NextCommissioner

CHANGE from Page 1

years of successful teaching experience who are seeking initial certification in Kentucky to serve a one-year internship. As part of the process, the intern must produce a traditional portfolio reflecting what he or she does as a teacher.

But that requirement is changing. Beginning in January 2007, all new teacher interns must complete a Teacher Performance Assessment (TPA) in lieu of a portfolio.

The TPA is both a process and a product. (See TPA Components on this page.) It is designed to more closely link effective instruction to successful student learning, according to the Education Professional Standards Board (EPSB).

Interns must demonstrate performance of Kentucky's New Teacher Standards as well as an ability to analyze their teaching and student learning. (See TPA Goals on this page.) All of the information and reflection that is generated as part of the TPA becomes a working document that is turned in at the end of the process.

"The most difficult thing about the TPA was learning to accept that perfection as a teacher does not exist," said Sisk. "I learned I'm stronger in some areas than in others, but that's OK."

Teacher Performance Assessment Components

Component I: Classroom Teaching

- develop a lesson plan
- demonstrate teaching skills during classroom observation
- analyze and evaluate teaching of a lesson

Component II: Professional Responsibilities

- collaborate to address special learning needs
- assess and manage professional
- demonstrate professional leadership Component III: Instructional Unit
- design learning objectives and assessments for an instructional
- design instructional strategies and activities for the instructional unit
- analyze, use and communicate unit learning results
- reflect on and evaluate teaching and learning in the instructional unit

The TPA is organized into three cycles. During the first two cycles, a committee made up of a resource teacher assigned to the intern, the school principal and a university teacher-educator observes the intern's classroom teaching.

The committee also evaluates the intern's ability to address professional responsibilities. Committee members point out positives as well as negatives and offer suggestions for improvement.

"Katie needed to work on classroom management, and this process gave her the support she needed to improve," said resource teacher Autumn McMillen. "In addition, KTIP provided the resources for Katie to observe in a variety of classrooms to see firsthand different classroom management models and to see what was working else-

"The program gave me the opportunity to work collaboratively with experienced teachers, which was vital to me throughout the process," said Sisk.

"My role with Katie was to be not only a resource, but also a mentor, adviser and friend," McMillen said. "There are so many questions that come up during your first year; it is nice to have someone there to answer questions for you without judg-

"Autumn was always there to give support when I needed it. I couldn't have made it through without her!" exclaimed Sisk.

The third cycle of the TPA assesses multiple dimensions of the intern's work through development of an instructional unit. In this phase, the intern is asked to document a plan for instruction, design an instructional unit covering two to four weeks

Teacher Performance Assessment Goals

- to increase teacher competence as defined by the Kentucky Teacher Standards
- to focus support on improving student achievement
- to draw on student data to guide support
- to document professional growth over • to promote self-assessment and
- reflection • to cultivate collaboration and
- leadership among teachers

of instruction, plan for the assessment of learning (both pre- and post-instruction), analyze the impact of instruction on student learning and reflect upon the success of the instructional unit.

At the end of each cycle, the committee scores the teacher against a rubric based on the Kentucky New Teacher Standards. Teacher interns must successfully demonstrate their abilities on all 10 teaching standards to pass the TPA and earn a professional teaching certificate.

Sisk said the TPA taught her how to reflect as a teacher. "You can identify your strengths and weaknesses. By identifying your weaknesses you have designated a growth area that you can work on. This allows you to continually grow and improve in areas where you need to improve and become even stronger in areas where you already excel."

Rosenwald-Dunbar Elementary Principal Beth Osborne believes better and more-qualified teachers are completing the KTIP program as the result of the move to the TPA program. "The TPA is more realistic of what a teacher is required to do in their classrooms during this era of accountability: assessing what students know; figuring out the best method to teach all students using differentiated strategies; assessing what those students learned following instruction; and putting intentional learning plans in place for students who do not master that specific core content," she said.

"Katie became a much stronger teacher as a result of the focused effort of the TPA," said McMillen, a veteran teacher. She said the TPA had an impact on her teaching as well.

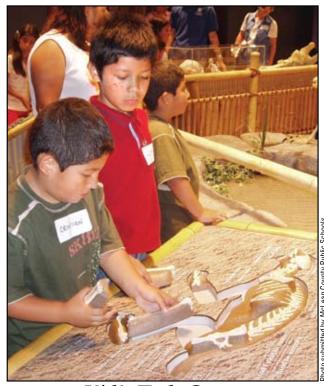
"Constantly reviewing the new teacher standards makes you continually re-evaluate yourself and your teaching. For me in particular, I found myself being reminded that I needed to keep consistent data on the progress of my students," McMillen said.

TPA was challenging and even stressful at times, but it was a learning process," said Sisk. "I was able to learn a lot about myself both professionally and personally. And that made me a better teacher."

MORE INFO ...

www.kyepsb.net/internships/ teacher performance. asp

Contact: Education Professional Standards Board, (502) 564-4606, toll free: (888) 598-9484



Kid's Tech Camp

Twenty-seven McLean County students, ages 4-13, participated in a summer education program titled Kid's Tech Camp. For two weeks, the students used computers and took part in small-group activities designed to help them work on basic academic skills and English- language literacy skills. Students also visited area museums to learn more about American culture and customs. Parents were engaged in student learning and shown how to help their children be successful in school.

PROJECT from Page 1



The University of Kentucky, as a PLTW-designated affiliate university, is working with other state postsecondary institutions to provide the high-quality, rigorous training for teachers, counselors and advisors that PLTW requires.

"The UK College of Engineering is committed to working collaboratively with mathematics, science and engineering technology teachers in the commonwealth to optimize their efforts," said Thomas Lester, dean of the College of Engineering. "We are very excited to be working with the PLTW teachers directly. The hands-on projects of PLTW combined with strong mathematics and science classes are powerful tools for teachers and students to use in expanding their construct of STEM education and careers."

Trigg County

Before Lori Ricks became the pre-engineering teacher at Trigg County High School, she traveled throughout the country working as an engineer. Three years ago, she joined the high school faculty to begin the school's PLTW program and "teach what I love. I am an engineer who became a teacher for this program," she said.

The school's program attracts all types of students, Ricks said, from "high-end mathematics students to students who are looking for a trade in drafting." The program grows each year, thanks in part to elementary and middle school programs that get students interested early in STEM curriculum.

"The earlier students can understand what engineers do – not just drive trains – the more they can think about how mathematics and science are used in their world," she said. "My high school class involves primary students in an Engineering Day every year. ... We also work with 5th graders on designing, making and racing dragster cars. The students love it!"

Jason Wilson, a 7th-grade teacher, coordinates the middle school program. Every student at Trigg County Middle School is involved in the Gateway to Technology program.

Mathematics and science scores on state assessments have increased for Trigg County students enrolled in PLTW classes. More than 90 students have earned college credit in these pre-engineering courses at the high school through Rochester Institute of New York and articulation agreements with Hopkinsville Community College, Ricks added. In addition, Trigg County students have started to consider engineering as a career.

"Our school has used the (PLTW) program to the fullest," she said. "We get the community involved, the parents, other teachers, other schools, guidance counselors. We have the TSA (Technology Student Association). We present to the board of education every year and Rotary. We invite the local newspaper and radio station to all our events. We just plain have fun!"

Scott County

Scott County High School is beginning its second year of PLTW offering two courses: Introduction to Engineering Design and Principles of Engineering. The middle school program, Gateway to Technology, is being expanded at all district middle schools – Georgetown Middle, Scott

County Middle and Royal Spring Middle – this school year.

Francis O'Hara, director of Career and Technical Education in Scott County, said the project-based curriculum is increasing the interest among students and teachers.

"More than 90 percent of last year's participating students wanted to continue to the next course," he said. "The curriculum is strong. Teachers are motivated and excited. These combine to create a classroom with high expectations and fun learning."

Jean Porter, a former engineer at Lexmark and NASA, teaches the pre-engineering program. This has helped attract girls to PLTW, according to O'Hara. More than 40 percent of the freshmen enrolled in PLTW courses are female.

"Our country needs engineers, while our schools need to explore new methods of teaching today's students," O'Hara said.

Pulaski County

Last year, Pulaski County students (exiting primary through grade 12) prepared for PLTW through STEM-related programs

Aaron Smith, left, Morgan Stevens, Mason Stevens, Dylan Baker and Austin Hyden, students in the gifted and talented program at Shopville Elementary (Pulaski County), test a roller coaster they constructed last school year before presenting their work to engineers in a pre-engineering expo. As 5th-graders, they explored careers in engineering and learned about aerospace and civil and energy engineering through a newly developed science, technology, engineering and mathematics (STEM) curriculum.

that allowed them to explore mathematics and science in new ways. They had opportunities to work with experts in the STEM fields.

As a result, students discovered connections to engineering in many aspects of their lives: sports, music, art, design, medicine, media and more. This fall, the excitement about STEM learning continues in the credit-bearing classes that teachers have been trained to teach.

Middle school students have filled the Gateway to Technology classes. A waiting list for future Gateway classes reflects Pulaski County's early successes in cultivating future STEM students. More than 120 high school underclassmen are taking Introduction to Engineering. An additional class of high school students is pursuing high-level mathematics through a Digital Electronics course.

Gifted and talented students are taking the classes, but so are students who often face challenges with mathematics and science. "They are gaining enhanced understandings and insights through application of the STEM concepts," said Mardi Montgomery, supervisor of special programs in Pulaski County and a participant of the statewide STEM Task Force.

"STEM and engineering are becoming common diction among a great number of our students, faculty and community," she added. Community support and pre-engineering partnerships have made possible not only exemplary classroom activities, but events like Pre-Engineering/Aviation Day, Engineering Week, Meet an Engineer Day and Pre-Engineering Parent/Student Awareness sessions.

"We are enriched by the collaborations with our P-16 partners that are aligning our P-8, high school, postsecondary and workplace goals to ensure a seamless pathway for our students' success in Kentucky's engineering and economic future," said Pulaski County Superintendent Tim Eaton. "Economic advancements are linked to quality educational opportunities. Project Lead The Way and our STEM initiative are advanced educational opportunities enabling our students and empowering our teachers to take the rigor of our mathematics and science to the next level."

STEM Task Force recommendations

- Energize and fund a statewide public-awareness campaign to help Kentuckians understand the critical importance of STEM to their own economic competitiveness and to that of the commonwealth.
- Create incentives and a supportive environment for students, teachers and institutions that pursue, succeed and excel in STEM disciplines throughout the P-20 pipeline.
- Implement international best practices in professional-development programs for P-16 STEM teachers to increase the intensity, duration and rigor of professional development.
- Improve teacher-preparation programs and encourage people with undergraduate and graduate STEM degrees to enter the teaching profession.
- Revolutionize how STEM subjects are taught, learned and assessed, and implement a statewide research-based STEM curriculum that is aligned with global work force and academic standards.
- Engage business, industry and civic leaders to improve STEM education and skills in the commonwealth, and create incentives for Kentucky businesses that employ and invest in STEM-educated students.
- Develop an ongoing, coordinated, statewide STEM initiative that maximizes the impact of resources among state agencies, schools, colleges, universities and businesses and is focused on developing and attracting STEM-related jobs to Kentucky.
- Target energy-sustainability problems and opportunities in Kentucky and the nation as a primary objective of statewide STEM enhancements.

The task force will release implementation action plans for these recommendations this fall. The full task force report is available online at http://cpe.ky.gov/news/reports/cpe_reports/stem.htm.

MORE INFO ...

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www.education.ky.gov – Enter"Project Lead The Way" in the search box in the upper right-hand corner.www.pltw.org

Leadership Letter

Compiled by Rebecca Blessing rebecca.blessing@education.ky.gov

High-speed Internet on track for January

The Kentucky Education Network (KEN) project is on track to have high-speed Internet connections in all 174 Kentucky public school districts by the end of January. Already the fiber network connections have been completed in more than two-thirds of the state's school districts.

In 1995, Kentucky became the first state in the nation to have every public school district connected to the Internet by what was considered then to be a "high-speed" connection. In 2000, Kentucky became the first state to have all public schools connected to the Internet by a true "high-speed" connection. As technology moved forward, the system became somewhat restrictive and

The KEN initiative is a collaborative effort of Kentucky's public schools (P-12), Council on Postsecondary Education, Education Professional Standards Board and work force organizations. KEN addresses the need to improve the speed in which information, content, applications and communications come into and leave school districts.

The increased bandwidth supplies additional capacity throughout the state and satisfies the large demands being made of the current network by students, teachers and staff members.

It's expected that all four phases of KEN will be completed in all state school districts by June 2008. All districts are scheduled to have internal high-speed connections between schools by July 2009.

Walk to School Month

October is Walk to School Month. The designation celebrates pedestrian and pedal power and promotes healthy lifestyles.

Help is available to schools wanting to sponsor Walk to School events. For five weeks leading up to Walk to School Day on Oct. 3, registered participants receive an e-newsletter with tips and resources on holding a Walk to School event. Users also have access to free downloadable materials including certificates, templates for printing stickers and frequent-walk punch cards.

In addition, registrants are automatically entered into a drawing to win pedometers and education materials. Registration is free and available online at www. walktoschool.org.

Many communities use Walk to School Month as a kickoff for a Safe Routes to School program. This program is designed to make walking and bicycling to school a safer, more appealing and healthier alternative for P-8 students.

The Kentucky Transportation Cabinet recently awarded \$1.7 million in Safe Routes to Schools funds to 13 communities for bike racks, new sidewalks, crosswalks, signs, education and enforcement projects.

To learn more about Kentucky's Safe Routes to School program or for assistance planning an October Walk to School event, go to www.saferouteskentucky.com or call the Kentucky Transportation Cabinet at (502) 564-2060.

School councils to meet in Louisville Oct. 9-10

The Kentucky Association of School Councils (KASC) Annual Conference will be held Oct. 9-10 in Louisville. This year's theme is "Inspiring Excellence One Student at a Time."

The conference offers ideas that inspire and strategies that parents, teachers and principals can use in their schools. Participants have the opportunity to receive required training, attend informative and active sessions about what's working in schools, visit exhibits and network with col-

Online registration is available at www. kasc.net/conference.html.

"Green cleaning" options available for schools

Many schools may be using cleaning products that contain toxic chemicals. However, safer, equally effective and cost-comparable alternatives often are available.

Now, in an effort to reduce exposure to harsh chemicals by students and staff, many schools are adopting "green cleaning" programs. In fact, several states have enacted legislation requiring elementary and secondary schools to purchase environmentally sensitive cleaning supplies.

To help schools get started with cleaning "green," Green Clean Schools, part of the Healthy Schools Campaign, is offering a free guide. "The Quick and Easy Guide to Green Cleaning in Schools" includes easyto-use information and resources for setting up a green cleaning program in schools. It is available online at www.greencleanschools. org or by calling toll free (888) 472-1810.

The Green Clean Schools initiative encourages schools to adopt environmentally friendly policies, practices and

Elementary principals to meet in October

The Kentucky Association of Elementary School Principals will hold its fall conference Oct. 17-18 in Louisville. The theme of the conference is "The New 'Rs' of School Leadership: Rigor, Relevance and Relation-

Registration and hotel information are available online at www.kaesp.org/pdev. htm#fall.

Educational leadership toolkit is online

The Education Commission of the States has released a new "Education Leadership Policy Toolkit." This online resource provides information on effective education leadership policies and practices.

The toolkit organizes information into eight key categories that represent the common leadership factors in all of the studied districts: vision, governance, relationships, culture, human development, instruction, evaluation and resource allocation. Within each category, users can find exemplary policies and practices, recommendations and key elements of effective leadership at three different levels: state, district and school.

Additionally, the site features case studies on the challenges and successes of three different districts: Boston, Mass.; National City, Calif.; and Memphis, Tenn. Each case study features audio clips of a teacher, a principal and the district superintendent describing how change was implemented and what conditions and beliefs are essential for effective and successful school leadership. The toolkit can be accessed online at www.ecs.org/MetLifeToolkit/ index-home.html.

Assessment conference

The Kentucky Association for Assessment Coordinators (KAAC) will hold the 2007 Scott Trimble Workshop on Instruction and Assessment Oct. 29-30 in Louisville. The theme of the workshop is "The Changing Face of Assessment." A series of sessions will focus on recent changes in

Other topics for sessions will include: characteristics of quality teaching; writing; accelerated mathematics; using open-response questions in the classroom; appropriate assessment practices; using data to make informed decisions; gender-specific classrooms; results of classroom research grants and much more.

Registration information is available on the KAAC Web site at www.kaac.org.

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Greetings from a new leader

Sheldon Berman, superintendent of Jefferson County Public Schools, extends greetings to an elementary school student as he talks with her about what she's learning in school. Berman assumed leadership of Kentucky's largest school district in July and immediately began working to replace Jefferson County's integration policy that was rejected in late June by the U.S. Supreme Court. Berman is calling for input from teachers, principals, parents, city leaders, civil rights groups, business groups and religious leaders to have the revised student assignment system in place by the 2009-10 school year.

One-to-one computer program impacts teaching and learning

By Rebecca Blessing

rebecca.blessing@education.ky.gov Cody Barnett walks into his biology class at Hazard (Independent) High School, puts down his books, flips open the top of his laptop computer and starts taking

Down the hall, Kolby Epperson is fast at work on his laptop researching a portfolio piece he's writing in his Global Issues class.

Everywhere a visitor looks in this eastern Kentucky school, students are using laptop computers – impressive for a school with a free- and reduced-price meal program participation rate of about 35 percent.

Thanks to Hazard High School's one-to-one computer program, each of the school's 300 students and 14 teachers has access to a laptop computer.

"The program has made my high school experience much easier," said Epperson. "Using my laptop computer, I can easily research and type my assignments."

Barnett agrees. "We've been able to participate in learning experiences that go beyond the classroom," he said. "The program has had a significant impact on my high school career."

In the fall, each senior is assigned an IBM/Lenovo Think-Pad loaded with software to use at school or home. Computers for underclassmen are kept on carts for easy accessibility in class but may be checked out and taken home when needed. Students pay a yearly fee of \$40 for tracking and theft protection.

Twenty wireless access points throughout the high school allow Internet access anywhere in the building. Students must provide their own Internet access at home.

The district has a strict acceptable-use policy that guides students. Every student must agree and sign the policy before having access to the computer and Internet. Inappropriate use can bring an end to a student's computer privileges.

"It's changed the way I teach," said biology teacher Sherri Cornett. "My instruction is based much more on creative thinking and answering challenging questions rather than just lecture. We have been able to make the academics more stringent without the students even realizing the material is more difficult."

Many teachers use the lap-

tops consistently but not in all areas, says counselor and former technology coordinator Denise Combs. English teachers use the computers extensively for research and portfolio development. Some teachers use Internet resources to supplement textbook material. Still other teachers use an online credit-recovery program for students who are struggling. Ceiling-mounted projectors are increasing classroom use, according to Combs.

"It's made me more computer literate," said Cornett. "For instance, I have taken classes on how to create WebQuests (Webbased inquiry-oriented lessons) using TrackStar and RubiStar (computerized lesson plan and rubric development tools). I've learned how to design my Web page to be more efficient and use e-mail as a classroom tool.

"Also, I provide my students with a Web site analysis sheet to advise them on which Web sites provide valuable resources," adds Cornett. "It is important to properly prepare your Internet lessons so that students do not freely roam the Internet all the time."

Currently, students use the computers for tasks such as taking notes, researching, composing and revising portfolio pieces, preparing class presentations, and typing papers.

"I have been able to keep track of my grades on my laptop and research colleges and universities that I might attend in the future," said Epperson. "I was also able to complete my Individual Learning Plan (ILP) much easier."

According to Combs, the school counselor, all students used the laptops last year for their ILPs. "It was a big help. We had a 98 percent completion rate and a 100 percent completion rate on the ILPs among students in the 9th-, 10th- and 12th-grades."

The school also has used the laptops in a pilot of online CATS testing. "It was an overwhelmingly positive experience," said Douglas Bryant, chief information officer for the school district.

"It is helping to level the playing field among our students," Combs said. She estimates about one-third of the students would not have access to a computer at home if it weren't for the program.

"It better prepares students for postsecondary work and life after high school since they are using the computers in ways that they will be expected to use them at the college level," Combs added.

Teachers credit the laptop computer program with increasing student engagement and communication.

"My students are more communicative, especially through e-mail," said Cornett. "I have found that many students are more likely to complete and turn in assignments if all they have to do is post it to a Web page, or network folder or e-mail it to me. Also, parents more readily communicate after seeing my classroom Web page or viewing student attendance and grade reports online at home."

The one-to-one laptop computer program started five years ago. It is funded by donations from local businesses, federal Title II funds and from the Kentucky Department of Education (for participation as a CATS online pilot site).

"There is no doubt the laptop program has had an impact on teaching and learning," Bryant said.

While the extent of that impact can be debated, Hazard High School has seen state assessment results increase each year since the program's start. In 2002, the school reported an academic index of 76.5, with a novice rate of 15 percent. In 2006, the school posted an academic index of 95 and a 7 percent novice rate. During the same period, the dropout rate at Hazard High School decreased from 3 percent to zero.

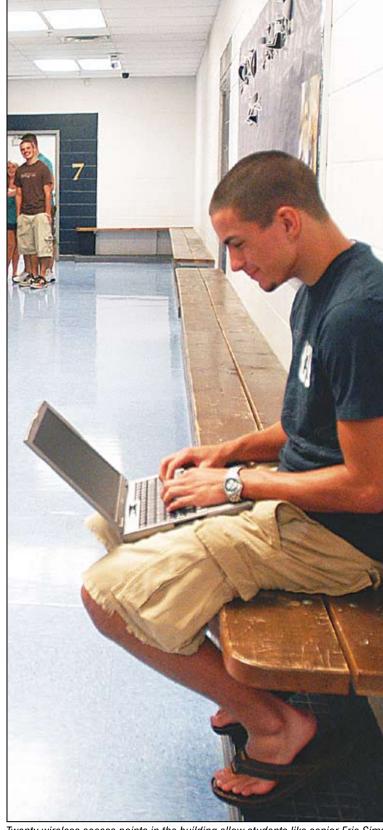
"It's been a labor of love that has more than justified the effort," said Bryant.

The program is not without its challenges however. Last year the district hired a laptop technician to solve connection and hardware problems and perform repairs, which can be expensive when warranties expire. "Broken screens due to neglect or intentional damage can cost \$600," said Combs.

As an incentive to take care of their assigned computers, seniors have the option of buying them upon graduation for \$125.

"I plan on buying it," says Barnett, the Hazard High student.
"It features programs that will be beneficial to my college future."

Fellow student Epperson said, "That's one reason I really love this program. In our poverty-stricken area, students can purchase their laptops for a small fee, and they will continuously help them in life."



Twenty wireless access points in the building allow students like senior Eric Sims to work on assignments any time, any place — even during class changes.



Seniors Eric Sims and Kara Gayhart head to class at Hazard (Independent) High School with laptops in their arms. The school's one-to-one laptop program provides take-home computers for every senior.